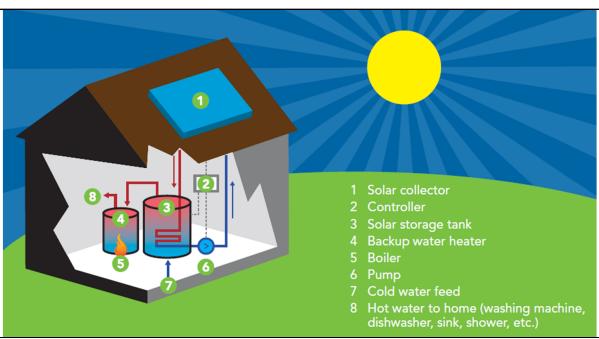
Harness the energy of sunshine with a

Solar Hot Water Heating System



A solar thermal system generates heat energy from sunlight. Solar collectors, or panels, are typically mounted on the roof. The rest of the system usually includes a pump and piping to circulate a heating liquid from the collectors to a heat exchanger in an insulated storage tank, and a controller to automatically operate the pump.



## What can Solar Thermal do for me?

Solar hot water systems can heat water for laundry, showers, or pools. These systems can often provide 50 percent to 75 percent of the building's total hot water needs. Depending on the type of heating system in the building, solar hot water systems can also provide space heating — which has enormous energy cost savings potential if the building is heated with oil heat. There are also generous incentives available to help cover the up-front investment cost, including grants from the Massachusetts Clean Energy Center and 0% interest financing from your investor-owned electric or natural gas provider.

Massachusetts Department



## **Steps for Success**

Make energy efficiency improvements. Call Mass SAVE® (800-632-8300) to schedule a no-cost energy assessment if you haven't had one in the past 5 years.

**Choose an installer:** DOER and MassCEC recommend soliciting bids from multiple installers, and checking references.

Apply for Incentives: Incentives can save you up to 50% of the cost of the system, through the Commonwealth Solar Hot Water Rebate program (masscec.com/solarhotwater). 0% interest HEAT loans are also available through Mass SAVE®.

Wait for your Rebate Award Letter before proceeding with system installation.

**Have your system installed** and inspected by plumbing and building inspectors.

**Get your Rebate:** Have your installer submit the project completion information to MassCEC. Once they have verified that the system meets the program requirements, they expect to mail rebate checks within 45 days.

## What happens when it isn't sunny?

Water is heated in the solar collectors and stored in an insulated solar storage tank. Buildings with solar water heating always have a backup option. The backup may be the building's existing water heating system, or, if you install a one-tank solar system, the solar storage tank will have a back up electric heating element.



Residential Flat Plate System - Saugus, MA

## How much does it cost to install a solar hot water system, and how much can I save?

The cost varies based on the size of the system, and how it fits into your existing plumbing. A qualified installer can estimate the overall cost, and will also inform customers about rebates and incentives for which you may qualify.

Currently, a two-collector system (for households with four to five people) costs approximately \$8,000 to \$10,000. The various incentives available could cut that cost roughly in half. There are also 0% interest loans available through Mass Save for terms up to 7 years to cover the remaining costs.